



# Chocolate Feast

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Change language : English

Little Bob loves chocolates, and goes to the store with  $\$N$  money in his pocket. The price of each chocolate is  $\$C$ . The store offers a discount: for every  $M$  wrappers he gives to the store, he gets one chocolate for free. How many chocolates does Bob get to eat?

### Input Format:

The first line contains the number of test cases  $T$  ( $\leq 1000$ ).  
 $T$  lines follow, each of which contains three integers  $N$ ,  $C$  and  $M$

### Output Format:

Print the total number of chocolates Bob eats.

### Constraints:

$$2 \leq N \leq 10^5$$
$$1 \leq C \leq N$$
$$2 \leq M \leq N$$

### Sample input

```
3
10 2 5
12 4 4
6 2 2
```

### Sample Output

```
6
3
5
```

### Explanation

In the first case, he can buy 5 chocolates with  $\$10$  and exchange the 5 wrappers to get one more chocolate. Thus, the total number of chocolates is 6.

In the second case, he can buy 3 chocolates for  $\$12$ . However, it takes 4 wrappers to get one more chocolate. He can't avail the offer and hence the total number of chocolates remains 3.

In the third case, he can buy 3 chocolates for  $\$6$ . Now he can give 2 of this 3 wrappers and get 1 chocolate. Again, he can use his 1 unused wrapper and 1 wrapper of new chocolate to get one more chocolate. So the total is 5.

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PHP



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